



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of : **Confirmation No. 1343**
Helmut FITZ et al. : Docket No. 2002-0004A
Serial No.10/038,910 : Group Art Unit 3683
Filed January 8, 2002 : Examiner Devon C. Kramer

BRAKING- AND DAMPING DEVICE, IN
PARTICULAR FOR MOVABLE PIECES
OF FURNITURE

REPLY BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

THE COMMISSIONER IS AUTHORIZED
TO CHARGE ANY DEFICIENCY IN THE
FEES FOR THIS PAPER TO DEPOSIT
ACCOUNT NO. 23-0975

Sir:

This Reply Brief is submitted in response to the Examiner's Answer mailed December 17, 2004 in the above-referenced Appeal.

An amendment has been filed separately from this Reply Brief to redraft dependent claim 34 into independent form. This amendment has been submitted to emphasize the limitations of this claim, but does not change the scope of the subject matter claimed by claim 34. Arguments below with respect to claim 34 apply equally to the claim whether in its dependent or independent form.

The following responds briefly to points raised by the Examiner in the Examiner's Answer. Because the claims are rejected over three separate patents, the below discussion will be presented in three separate sections corresponding to the respective prior art patents.

Smalley

1. In responding to Appellants' arguments in section 11 on page 3 of the Office Action, the Examiner states that air is present in the cylinder 6 of Smalley, that as the pistons

move air is pushed out and elements 18 and 19a can be considered pistons because they work against the force of the bushings and cooperate with the bushings to move fluid out of the fluid cylinder when a bushing is fully compressed.

However, air is not a working fluid in the cylinder of Smalley. Smalley is not a fluid piston. The "pistons" do not work against the force of the air moving through the cylinder in Smalley.

2. The Examiner argues that the elastically deformable members 21 and 22 of Smalley are positioned between the two pistons 18 and 19a and squeezed between them. The Examiner further points out that element 10 assists in squeezing but squeezing still takes place between the pistons.

However, claim 22 requires an elastically deformable sealing member "arranged between said two pistons such that when damping occurs by said piston rod displacing the one of said two pistons in said fluid cylinder, said elastically deformable sealing member is squeezed between said two pistons and pressed against that cylinder wall." Damping does not take place by displacement of a piston in the cylinder of Smalley; further the elastically deformable member of Smalley is squeezed between a piston and the member 10. It is not squeezed between the two pistons, as the other piston is moving away from the fixed element 10.

3. The Examiner addresses claim 34 by stating that Smalley provides two bushing members.

However, claim 34 requires that a second of the two pistons comprise a seal which seals with the cylinder wall of the cylinder. This is an additional element beyond the elastically deformable sealing member. Neither bushing 21 nor bushing 22 forms a seal with cylinder 6. In particular, as is readily appreciated from Fig. 5 of Smalley, when one bushing 21 is deformed into contact with the cylinder 6, and thus presumably is acting as the "elastically deformable sealing member" of the claim in accordance with the Examiner's position, the other bushing 22 is even further from the cylinder 6, and cannot operate as a sealing member. These are two separate functions of the present invention in that one provides a seal at the piston, and the other provides

a deformable member that is pressed against the cylinder wall when squeezed between the two pistons.

It is the object of the present invention to provide an improved sealing effect between the piston and the cylinder wall and an improved damping effect. To achieve an optimum with respect to both the frictional effect as well as the sealing effect, the present invention provides in claim 34 the separated elements of the seal and the elastically deformable member.

4. In the paragraph spanning pages 4 and 5 of the Answer, the Examiner states that elements 18 and 19a are considered the two pistons and that the two elastically deformable members 21 and 22 form a connection between the two pistons.

However, claim 35 requires the sealing member to comprise "a solid body made of rubber elastic material that connects said two pistons." The bushings 21 and 22 of Smalley are interrupted by the element 10, and thus do not form a solid body made of a rubber elastic material that connects the two pistons. This language does not permit considering two separate rubber bodies interrupted by a fixed element to be considered a connection between the two pistons. The pistons are in fact unconnected by the bushings 21 and 22 in Smalley.

5. In response to Appellants' argument that there is no motivation to combine Smalley with Muller, the Examiner notes that "both devices absorb impact to avoid excessive damage to parts, and both have similar structure."

However, the Examiner fails to address the issue of motivation. Further, the Examiner fails to address the issue of analogous prior art. It is submitted to be abundantly clear that Smalley is not analogous art that may be considered in a rejection under 35 U.S.C. §103, as discussed in the Brief. The Examiner has failed to address the test for analogous prior art. Further, no proper motivation has been cited. Similarity of structure or function is not motivation.

6. The Examiner argues that Smalley causes damping by friction in addition to damping by fluid damping. The Examiner argues that friction damping occurs when the sealing members 21 and 22 of Smalley contact the inner wall of the fluid cylinder.

However, there is no movement of the bushings 21 and 22 along the wall of the cylinder 6 to cause damping. They are simply squeezed outwardly, providing direct resistance against movement. They do not scrape the wall to provide frictional resistance. There is no air or fluid damping, clearly, taking place in Smalley.

Cocoran

1. The Examiner primarily argues that "Appellants' two pistons can be considered a single piston."

However, Appellants in fact claim two separate pistons with an elastically deformable sealing member or friction braking member therebetween. The washers of Cocoran do not act as pistons. With the present invention, there is damping due to movement of two separate pistons through the cylinder, and there may be additional frictional damping due to deformation of the elastically deformable member. This is not the case with Cocoran.

2. Regarding the motivation with respect to the combination of Cocoran and Muller, the Examiner argues that the dampers are similar in structure and both capable of being mounted to a piece of furniture. Again, this ignores the requirement of motivation, as well as what is required to be analogous prior art.

Beyene

1. The Examiner argues that item 26 is a piston with rod 28. The Examiner thus considers the cylinder 22 to be the fluid cylinder.

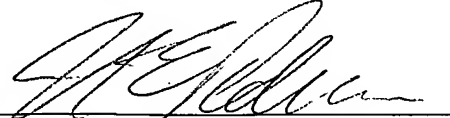
However, a piston can not fixed with respect to its fluid cylinder. In Beyene, portion 26 is fixed with respect to cylinder 22. Claim 22 requires both pistons to be linearly displaceable in the fluid cylinder. But 26 is not linearly displaceable in cylinder 22, because they are fixed. Thus, claim 22 cannot be read on Beyene.

2. There is no motivation to combine Beyene with Muller, and Beyene does not represent analogous art with respect to the present invention. As such, the combination rejection must, again, be reversed.

In view of the above as well as the prior Briefs on Appeal, it is submitted that all of the rejections raised by the Examiner must be reversed, and such is respectfully requested.

Respectfully submitted,

Helmut FITZ et al.

By 

Nils E. Pedersen

Registration No.33,145

Attorney for Appellants

NEP/krp
Washington, D.C.
Telephone (202) 721-8200
Facsimile (202) 721-8250
February 17, 2005